

Grobet Swiss Files and Tools

TRADE MARK



F. L. Grobet





GROBET SWISS FILES



L. GROBET was the original Swiss File Maker and started manufacturing his precision files in 1812, in Vallorbe, Switzerland. All the various shapes of files for precision work and the scale of cuts which he invented are still in use today.

The high quality of Grobet Swiss Files was immediately recognized, and the expression "Swiss Files" was adopted all over the world to designate "precision" files.

Grobet Swiss Files, the "STANDARD" for precision files, have been extensively copied, but never equalled. The present high quality of these Genuine Swiss Files is the result of 151 years of practical experience, scientific research and untiring efforts to produce nothing but the best.

Generation after generation of America's finest craftsmen have treasured and used Grobet Swiss Files. Today, as ever, your toolmakers, instrumentmakers, diemakers, are still entitled to the best precision files available. Give them GROBET SWISS FILES.

Grobet Swiss Files are made of **chrome steel**, which gives them maximum hardness and durability.

Genuine Grobet Swiss Files are stamped with the celebrated rabbit trademark.



F. L. Grobet

which is your guarantee for quality.



Grobet Swiss Files Line

To the original shapes of Swiss Files, invented by F. L. Grobet, very few indeed have been added during the last 151 years. From the start the Grobet Swiss line has been practically complete. However, with the coming of the machine age, it became necessary to include various types of files for filing machines—see pages 15 to 19.

Today the Grobet Line of Swiss Files is the most complete line of precision files; over 4,000 different shapes, sizes and cuts are listed in this catalog. There is a Grobet Swiss File for every conceivable type of precision filing that is done by tool and die makers, instrument makers, watch makers, opticians, dentists, jewelers, etc.

Scale of Cuts

The scale of cuts for precision files was invented by F. L. Grobet, the original Swiss file maker.

Teeth per inch (up cut)	30	38	51	64	79
Length of files 10" and over	00	0	1	2	3
Length of files 4" to 8"		00	0	1	2
Length of files 2½" to 3½"			00	0	1
Escapement files			00	0	1
Needle files 4" to 7¾"			00	0	1
Regular Riffles				0	1
Teeth per inch (up cut)	97	117	142	173	213
Length of files 10" and over	4	5	6		
Length of files 4" to 8"	3	4	5	6	
Length of files 2½" to 3½"	2	3	4	5	6
Escapement files	2	3	4	5	6
Needle files 4" to 7¾"	2	3	4	5	6
Regular Riffles	2	3	4	5	6

Swiss cuts compare with the cuts of American Pattern Files as follows:

SWISS	-	-	-	-	-	-	No. 00	No. 0	No. 2
AMERICAN PATTERN	-	-	-	-	-	-	Bastard	2nd Cut	Smooth

For cuts numbered from 4 to 10 there is no equivalent in American Pattern Files.

The Grobet Quality

Unexcelled during the last century, Grobet Genuine Swiss Files are still unsurpassed today as to correctness and precision of shape, accuracy of size, hardness and durability.

Although our factories are now extensively mechanized, the human element, in the making of precision files, (which necessitates as many as 30 operations), is still as great as ever. Generation after generation of Swiss craftsmen have given us their best. It is to them, to their inherited skill, their conscientiousness, that we owe our reputation. Without them, the scientific knowledge, the ingenuity of our technical staff, mechanical engineers, metallurgists, chemists, etc., would be of little avail.

The Grobet factories are equipped with the most modern machinery; our special forging and cutting machines having been developed by our own mechanical engineers; metallurgists conduct our tests and research work in our laboratories and also supervise our special hardening process. By the almost exclusive use of special chrome steel, we are able to make files of maximum hardness and durability.



Index

Grobet Swiss Precision Files

Barrette	8	Machine Files, Parallel		Rifflers, Diemakers	24, 25, 26
Broach	8	Type A	15	Rifflers, Diesinkers,	
Cant	8	Type B	15	Small, Medium, Large	20, 21
Checkering	10	Type C	16, 17	Rifflers, Regular	20, 21
Contact Point	6	Type D	17	Rifflers, Silversmith	22
Corrugating	10	Type E	18	Rifflers, Silversmith, Special	23
Crochet	9	Type F	19	Rifflers, Wood	27
Crossing	6	Type G	19	Round	8
Demi Narrow Pillar	4	Type X	15	Round, Parallel	8
Diesinkers	14	Narrow Pillar	4	Round Edge Joint	7
Distributors	6	Needle, Round Handle	12, 13	Round, Vulcanite	10
Equalling	7	Needle, Square Handle	11	Scale of Cuts	2
Escapement	11	Parallel Machine	15 to 19	Saw, Metal	9
Extra Narrow Pillar	4	Parallel Round	8	Saw, Slim Taper	9
Flat, for soft metal	5	Parallel Square	9	Saw, Taper	9
Half Round	5	Pillar	4	Screwhead	10
Half Round for soft metal	5	Pillar, Demi Narrow	4	Slitting	6
Half Round Ring	5	Pillar, Narrow	4	Square	9
Half Round Slim	5	Pillar, Extra Narrow	4	Square, Parallel	9
Half Round Vulcanite	10	Pillar, Special Widths	4	Square Edge Joint	7
Hand	4	Pillar Testing	5	Testing, Pillar	5
Joint, Round Edge	7	Pippin	9	Three Square	6
Joint, Square Edge	7	Pivot	10	Three Square, Slim	6
Knife	6			Warding	7

Other Files and Tools

American Pattern	30	Rotary		Countersinks	32
Curved Tooth Cut	30	Hand Cut, Ground Cut,		Tools	
Milled Cut	30	Carbide	31, 32	For Die Makers, Tool Makers,	
Shear Cut	30	Tube Deburring	31	Watchmakers, Jewelers, En-	
Tungsten Point	6	Burs		gravers and Opticians	28, 29
		Diesinkers, Jewelers	32	File Handles	30

HOW TO ORDER GROBET SWISS PRECISION FILES

When ordering Grobet Swiss Files, specify **shape, size and cut** and, if necessary, width or diameter—for Parallel Machine files especially—and gauges—for Warding, Equalling and Joint Files).

The length of the file is the distance between its point to the shoulder (that part of the file where the tang begins). However, when ordering Needle Files, Escapement Files, Rifflers, and Parallel Machine Files, the length over all should be specified.

Special files can be made to order as per specifications, drawings or samples.

When placing your orders for precision files through a supply house, do not fail to specify GROBET SWISS FILES, and before ordering any files, remember the following facts about Genuine Grobet Swiss Files.

Grobet Swiss Files have more filing surface than most of the Swiss Pattern Files of other makes of corresponding lengths.

Grobet Files are not manufactured to meet a certain price but only with the purpose of achieving the greatest performance.

Grobet Files are made of chrome steel for greater hardness and durability.

Grobet produces more Swiss Files, in more shapes, and in more sizes, than any other manufacturer in the world.

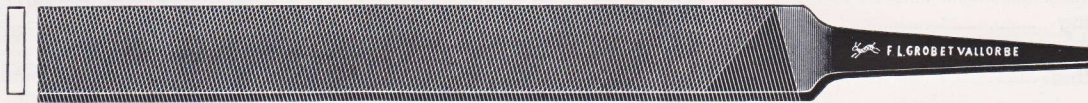
Large stocks are carried in New York City, Chicago, Detroit and Canada, and also by leading supply houses in all industrial centers.



GROBET SWISS FILES

The length of a file is always understood to mean the length of cut part only.

HAND FILES



Cuts Nos. 00, 0, 1, 2, 3, 4, 5, 6, and 8

Length.....	3	4	5	6	8	10	12 in.
Width.....	$\frac{7}{16}$	$\frac{11}{32}$	$\frac{21}{32}$	$\frac{25}{32}$	$\frac{29}{32}$	1	$1\frac{3}{16}$ in.
Thickness.....	$\frac{3}{32}$	$\frac{1}{8}$	$\frac{9}{64}$	$\frac{11}{64}$	$\frac{13}{64}$	$\frac{7}{32}$	$\frac{5}{16}$ in.

Hand Files are parallel in width, and taper in thickness. Cut on flat sides and on one edge.

REGULAR PILLAR FILES



Cuts Nos. 00, 0, 1, 2, 3, 4, 5, 6, and 8

Length.....	3	4	5	6	8	10	12 in.
Width.....	$\frac{3}{32}$	$\frac{3}{8}$	$\frac{7}{16}$	$\frac{1}{2}$	$\frac{19}{32}$	$\frac{23}{32}$	$\frac{25}{16}$ in.
Thickness.....	$\frac{3}{32}$	$\frac{1}{8}$	$\frac{5}{32}$	$\frac{11}{64}$	$\frac{13}{64}$	$\frac{15}{64}$	$\frac{15}{32}$ in.

Pillar Files are parallel in width, and taper in thickness. Cut on the flat sides only.

DEMI NARROW PILLAR FILES

Cuts Nos. 00, 0, 1, 2, 3, 4, 5, 6, and 8

Length.....	3	4	6	8	10	12 in.
Width.....	$\frac{7}{32}$	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{15}{32}$	$\frac{9}{16}$	$\frac{5}{8}$ in.
Thickness.....	$\frac{5}{64}$	$\frac{7}{64}$	$\frac{3}{32}$	$\frac{5}{16}$	$\frac{7}{32}$	$\frac{1}{4}$ in.

NARROW PILLAR FILES



Cuts Nos. 00, 0, 1, 2, 3, 4, 5, 6, and 8

Length.....	3	4	5	6	8	10	12 in.
Width.....	$\frac{11}{64}$	$\frac{7}{32}$	$\frac{15}{64}$	$\frac{1}{4}$	$\frac{11}{32}$	$\frac{25}{64}$	$\frac{15}{32}$ in.
Thickness.....	$\frac{5}{64}$	$\frac{7}{64}$	$\frac{1}{8}$	$\frac{9}{64}$	$\frac{11}{64}$	$\frac{3}{16}$	$\frac{15}{64}$ in.

Demi Narrow and Narrow Pillar Files are parallel in width, and taper in thickness. Cut on the flat sides only.

EXTRA NARROW PILLAR FILES



Cuts Nos. 00, 0, 1, 2, 3, 4, 5, 6, and 8

Length.....	3	4	5	6	8	10	12 in.
Width.....	$\frac{1}{8}$	$\frac{5}{32}$	$\frac{3}{16}$	$\frac{13}{64}$	$\frac{3}{8}$	$\frac{11}{32}$	$\frac{7}{16}$ in.
Thickness.....	$\frac{5}{64}$	$\frac{3}{32}$	$\frac{7}{64}$	$\frac{1}{8}$	$\frac{9}{64}$	$\frac{11}{64}$	$\frac{13}{64}$ in.

Extra Narrow Pillar Files are parallel in width, and taper in thickness. Cut on the flat sides only.

PILLAR FILES ARE ALSO MADE IN THE FOLLOWING SPECIAL WIDTHS

Cuts Nos. 00, 0, 1, 2, 4, and 6

Width.....	4	6	8 in.
Length.....	$\frac{1}{4}$	$\frac{1}{8}$	$\frac{3}{8}$ in.
		$\frac{3}{16}$	$\frac{1}{2}$ in.
		$\frac{3}{8}$	$\frac{5}{8}$ in.

**PILLAR TESTING FILES**

USED TO TEST HARDNESS OF TEMPERED TOOLS AND METALS



Cuts Nos. 0 and 1

Length.....	6	8 in.
Width.....	$\frac{1}{2}$	$\frac{19}{32}$ in.
Thickness.....	$\frac{11}{64}$	$\frac{13}{64}$ in.

HALF ROUND FILES

Cuts Nos. 00, 0, 1, 2, 3, 4, 5, and 6

Length.....	3	4	5	6	8	10	12 in.
Width.....	$\frac{5}{16}$	$\frac{15}{32}$	$\frac{17}{32}$	$\frac{5}{8}$	$\frac{13}{16}$	1	$1\frac{1}{8}$ in.
Thickness.....	$\frac{3}{32}$	$\frac{9}{64}$	$\frac{5}{32}$	$\frac{13}{64}$	$\frac{15}{64}$	$\frac{5}{16}$	$\frac{25}{64}$ in.

HALF ROUND SLIM FILES

Cuts Nos. 00, 0, 1, 2, 3, 4, and 6

Length.....	4	5	6	8 in.
Width.....	$\frac{3}{8}$	$\frac{7}{16}$	$\frac{1}{2}$	$\frac{3}{4}$ in.
Thickness.....	$\frac{7}{64}$	$\frac{7}{64}$	$\frac{5}{32}$	$\frac{7}{32}$ in.

HALF ROUND RING FILES

Cuts Nos. 00, 0, 1, 2, 3, 4, 5, and 6

Length.....	5	6	7 in.
Width.....	$\frac{7}{16}$	$\frac{1}{2}$	$\frac{1}{2}$ in.
Thickness.....	$\frac{7}{64}$	$\frac{5}{32}$	$\frac{5}{32}$ in.

HALF ROUND FILES

COARSE OPEN CUT FOR SOFT METALS



Cut No. 000

Length.....	6	8	10 in.
Width.....	$\frac{5}{8}$	$\frac{13}{16}$	1 in.
Thickness.....	$\frac{13}{64}$	$\frac{15}{64}$	$\frac{5}{16}$ in.

FLAT FILES

COARSE OPEN CUT FOR SOFT METALS



Cut No. 000

Length.....	6	8	10 in.
Width.....	$\frac{5}{8}$	$\frac{13}{16}$	1 in.
Thickness.....	$\frac{9}{64}$	$\frac{11}{64}$	$\frac{15}{64}$ in.



CROSSING FILES



Cuts Nos. 00, 0, 1, 2, 3, 4, and 6

Length.....	3	4	5	6	8	10 in.
Width.....	$\frac{5}{16}$	$\frac{15}{32}$	$\frac{17}{32}$	$\frac{5}{8}$	$\frac{13}{16}$	1 in.
Thickness.....	$\frac{3}{32}$	$\frac{9}{64}$	$\frac{5}{32}$	$\frac{13}{64}$	$\frac{15}{64}$	$\frac{5}{16}$ in.

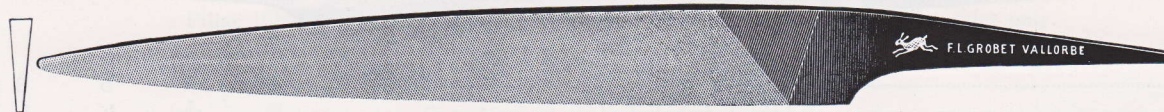
Crossing Files are halfround on both sides, one side having a larger radius than the other.

THREE SQUARE FILES
REGULAR AND SLIM

Cuts Nos. 00, 0, 1, 2, 3, 4, 5, and 6

Length.....	3	4	5	6	8	10 in.
Width of Regular.....	$\frac{13}{16}$	$\frac{3}{2}$	$\frac{17}{16}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{5}{8}$ in.
Width of Slim.....	$\frac{5}{32}$	$\frac{3}{16}$	....	$\frac{5}{16}$	$\frac{7}{16}$	.... in.

KNIFE FILES



Cuts Nos. 00, 0, 1, 2, 3, 4, and 6

Length.....	3	4	5	6	8 in.
Width.....	$\frac{23}{64}$	$\frac{1}{2}$	$\frac{19}{32}$	$\frac{33}{32}$	$\frac{7}{8}$ in.
Thickness.....	$\frac{5}{64}$	$\frac{1}{8}$	$\frac{5}{32}$	$\frac{5}{32}$	$\frac{13}{64}$ in.

SLITTING FILES



Cuts Nos. 00, 0, 1, 2, 4, and 6

Length.....	4	6	8 in.
Width.....	$\frac{33}{64}$	$\frac{19}{32}$	$\frac{21}{32}$ in.
Thickness.....	$\frac{5}{64}$	$\frac{9}{64}$	$\frac{9}{64}$ in.

DISTRIBUTORS FILES



Cuts Nos. 0 and 3

Length of cut.....	2 1/2 in.
Length over all.....	6 3/8 in.

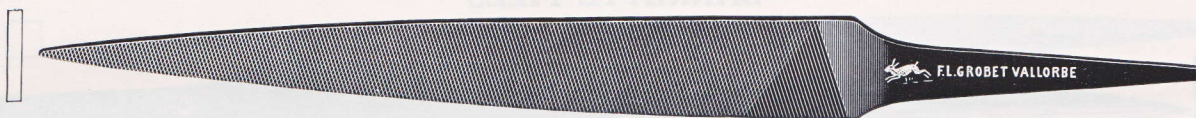
Screw driver end. Boxed, 1 Doz. to a Box. On Cards, 1 Doz. to a Card.

CONTACT POINT FILES

To clean electric contacts (points and surface) in magnetos, commutators, distributors, electric instruments, telephone telegraph instruments, we recommend **Escapement Equalling** 5 1/2 in., Cuts 5 and 6, or **Equalling** 3 to 4 in., Cuts 5, 6 and 8.



WARDING FILES



Cuts Nos. 00, 0, 1, 2, 3, 4, and 6

Length.....	3	4	5	6	8	10 in.
Width.....	$\frac{23}{64}$	$\frac{1}{2}$	$\frac{19}{32}$	$\frac{5}{8}$	$\frac{7}{8}$	1 in.

Warding Files are parallel in thickness. Cut on four sides up to 4 inches;
cut on three sides $4\frac{1}{2}$ in. and above.

EQUALLING FILES



Cuts Nos. 00, 0, 1, 2, 3, 4, and 6

Length.....	3	4	5	6	8 in.
Width.....	$\frac{21}{64}$	$\frac{13}{32}$	$\frac{15}{32}$	$\frac{1}{2}$	$\frac{31}{32}$ in.

Equalling Files are parallel in width and thickness. Cut on four sides.

Warding and Equalling Files, if not otherwise specified, are assorted in thickness (three different thicknesses to the dozen. See following table.)

Length.....	3	4	5	6	8 in.
Thickness by Stubs' gauge.....	19	16	14	12	8
	21	18	16	14	10
	23	20	18	16	12

Warding and Equalling Files can also be ordered by the gauge. Specify either **Stubs' or Brown & Sharpe's gauge**.
Following sizes are carried in stock.

Cuts Nos. 00, 0, 1, 2, and 4

Length.....	3	4	5	6	8 in.
Thickness by Stubs' gauge.....	19	16 21 24	14	12 18	8
	21	18 22 26	16	14 20	10
	23	20 23 28	18	16 22	12

EQUALLING FILES AND NEEDLE BED FILES FOR KNITTING MACHINES

Ask for pamphlet N-1.

ROUND EDGE JOINT FILES



Cuts Nos. 0, 1, and 2

Length.....		4			$\frac{7}{8}$ in.
Width.....		$\frac{13}{32}$			$\frac{1}{2}$ in.
Thickness by Stubs' gauge.....	14	17 20 23	*26		10 16
	15	18 21 *24	*27		12 18
	16	19 22 *25	*28		14 20

*Made in Cuts Nos. 1 and 2 only

†Made in Cuts Nos. 0 and 2 only

SQUARE EDGE JOINT FILES



Cuts Nos. 0, 1, and 2

Length.....		4			$\frac{7}{8}$ in.
Width.....		$\frac{13}{32}$			$\frac{1}{2}$ in.
Thickness by Stubs' gauge.....	16	20	22 *24	**26	10 14
	18	21	*23 *25	**28	12 16

*Made in Cuts Nos. 1 and 2 only

**Made in Cut No. 2 only

†Made in Cuts Nos. 0 and 2 only

Round Edge and Square Edge Joint Files are parallel in width and thickness.
Cut on the edges only.

**BARRETTE FILES**

Shape I — Flat Back



Shape II — Pointed Back

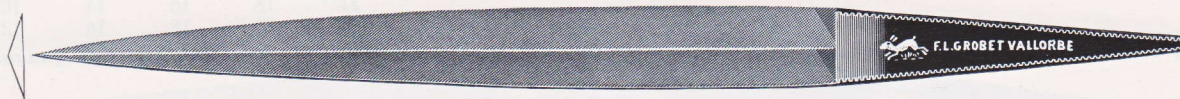


Cuts Nos. 00, 0, 1, 2, 3, 4, 5, 6, and 8

Length.....	3	3½	4	4½	5	6	8 in.
Width.....	$\frac{23}{64}$	$\frac{7}{16}$	$\frac{1}{2}$	$\frac{3}{4}$	$\frac{19}{32}$	$\frac{33}{32}$	$\frac{7}{8}$ in.
Thickness.....	$\frac{3}{32}$	$\frac{3}{32}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{9}{64}$	$\frac{5}{32}$	$\frac{11}{64}$ in.

Barrette Files are cut on the flat side only.

If not otherwise specified, Barrette Files are made in shape II, in 3 in. and 3½ in. length, and in shape I, from 4 in. to 8 in.

CANT FILES

Cuts Nos. 00, 0, 1, 2, 4, and 6

Length.....	4	6	8 in.
Width.....	$\frac{7}{16}$	$\frac{19}{32}$	$\frac{33}{32}$ in.
Thickness.....	$\frac{1}{8}$	$\frac{9}{64}$	$\frac{5}{32}$ in.

Cant Files are cut on three sides.

ROUND FILES

Cuts Nos. 00, 0, 1, 2, 3, 4, 5, 6, and 8

Length.....	2	2½	3	3½	4	4½	5	6	8	10	12 in.
Diameter.....	$\frac{1}{16}$	$\frac{5}{64}$	$\frac{3}{32}$	$\frac{1}{8}$	$\frac{5}{32}$	$\frac{11}{64}$	$\frac{13}{64}$	$\frac{15}{64}$	$\frac{1}{4}$	$\frac{13}{32}$	$\frac{15}{32}$ in.

PARALLEL ROUND FILES

Cuts Nos. 00, 0, 1, 2, and 4

Length.....	4	5	6	8	10 in.
Diameter.....	$\frac{1}{16}$	$\frac{1}{16}$	$\frac{1}{16}$	...	... in.
	$\frac{3}{32}$	$\frac{3}{32}$	$\frac{3}{32}$	...	... in.
	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	...	... in.
	...	$\frac{5}{32}$	$\frac{5}{32}$	...	... in.
	...	$\frac{3}{16}$	$\frac{3}{16}$	...	... in.
	...	...	$\frac{3}{16}$	$\frac{1}{4}$	... in.
	...	...	$\frac{1}{4}$	$\frac{1}{4}$	... in.
	...	...	$\frac{5}{16}$	$\frac{5}{16}$	... in.
	...	...	$\frac{3}{8}$	$\frac{3}{8}$	$\frac{3}{8}$ in.
	...	...	...	...	$\frac{1}{2}$ in.

BROACH FILES 3 in. long can be obtained in sizes 40 to 70 Steel Wire Gauge.



SQUARE FILES



Cuts Nos. 00, 0, 1, 2, 3, 4, 5, 6, and 8

Length.....	2	2½	3	4	5	6	8	10	12 in.
Width.....	$\frac{1}{16}$	$\frac{5}{64}$	$\frac{3}{32}$	$\frac{5}{32}$	$\frac{13}{64}$	$\frac{15}{64}$	$\frac{5}{16}$	$\frac{13}{32}$	$\frac{1}{2}$ in.

Square Files are cut on three sides. Four sides cut made to order.

PARALLEL SQUARE FILES



Cuts Nos. 00, 0, and 2

Length.....	4	6	8	10 in.
Width.....	$\frac{1}{8}$	$\frac{3}{16}$	$\frac{1}{4}$	$\frac{3}{8}$ in.
	....	$\frac{1}{4}$	$\frac{5}{16}$	.... in.

CROCHET FILES



Cuts Nos. 00, 0, 1, 2, 3, and 4

Length.....	3	4	6	8	10 in.
Width.....	$\frac{9}{32}$	$\frac{5}{16}$	$\frac{13}{32}$	$\frac{15}{32}$	$\frac{5}{8}$ in.
Thickness.....	$\frac{3}{32}$	$\frac{3}{32}$	$\frac{9}{64}$	$\frac{11}{64}$	$\frac{13}{64}$ in.

Crochet Files taper slightly in thickness. Cut on flat sides and two round edges.

PIPPIN FILES



Cuts Nos. 00, 0, 1, 2, 3, 4, and 6

Length.....	3	3½	4	6	8 in.
Width.....	$\frac{7}{32}$	$\frac{15}{64}$	$\frac{19}{64}$	$\frac{25}{64}$	$\frac{15}{32}$ in.
Thickness.....	$\frac{5}{64}$	$\frac{3}{32}$	$\frac{7}{64}$	$\frac{9}{64}$	$\frac{11}{64}$ in.

TAPER SAW FILES REGULAR AND SLIM



Cuts Nos. 0 and 2

Length.....	4	6 in.
Width of Regular.....	$\frac{5}{16}$	$\frac{7}{16}$ in.
Width of Slim.....	$\frac{3}{16}$	$\frac{11}{32}$ in.

Taper Saw Files are double cut.

METAL SAW FILES



Cuts Nos. 0, 2, and 4

Length.....	4	5	6	8 in.
Width.....	$\frac{7}{32}$	$\frac{5}{16}$	$\frac{11}{32}$	$\frac{7}{16}$ in.

Metal Saw Files are parallel in width, double cut



CORRUGATING FILES



Cuts Nos. 00, 0, 1, 2, 3, and 4

Length..... 6 in.
 Width..... $\frac{9}{16}$ in.
 Thickness..... $\frac{1}{8}$ in.

Corrugating Files are used for corrugating the edges of tools and barbers' shears.

CHECKERING FILES

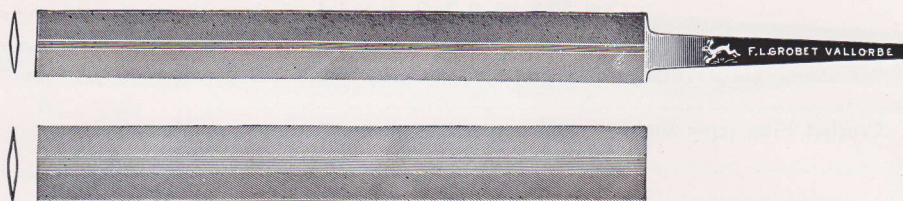


Cuts Nos. 0000 000 00 0 1 2 3 4
 Lines per in. 12 15 20 30 40 50 60 75

	HAND		PILLAR	
Length.....	6	8 in.	Length.....	6
Width.....	$\frac{3}{8}$	$\frac{29}{32}$ in.	Width.....	$\frac{1}{2}$
Thickness.....	$\frac{11}{64}$	$\frac{3}{16}$ in.	Thickness.....	$\frac{11}{64}$

Checkering Files are used by gunsmiths, surgical instrument makers, etc.

SCREW HEAD FILES—With and Without Tang

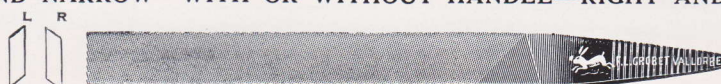


Thickness Nos. 0, 1, 2, 3, 4, 5, 6, and 8

Length..... 2 2½ 3 3½ 4 in.
 Width of Regular..... $\frac{11}{32}$ $\frac{11}{32}$ $\frac{25}{64}$ $\frac{33}{64}$ $\frac{19}{32}$ in.
 Width of Narrow..... $\frac{1}{4}$ $\frac{5}{16}$ in.

PIVOT FILES and PIVOT BURNISHERS

REGULAR AND NARROW—WITH OR WITHOUT HANDLE—RIGHT AND LEFT HAND



REGULAR PIVOT FILES

Cut No. 8

Length..... 2¼ in.
 Width..... $\frac{19}{64}$ in.
 Thickness..... $\frac{9}{64}$ in.

HALF ROUND VULCANITE FILES



Cut No. 000

Length..... 8 9 in.
 Width..... $\frac{35}{64}$ $\frac{19}{32}$ in.
 Thickness..... $\frac{5}{32}$ $\frac{3}{32}$ in.

For use on Hard Rubber, Plastic Materials, Soft Metals, Stone.

ROUND VULCANITE FILES



Cut No. 000

Length..... 5 6 in.
 Diameter..... $\frac{13}{64}$ $\frac{13}{64}$ in.

ESCAPEMENT FILES

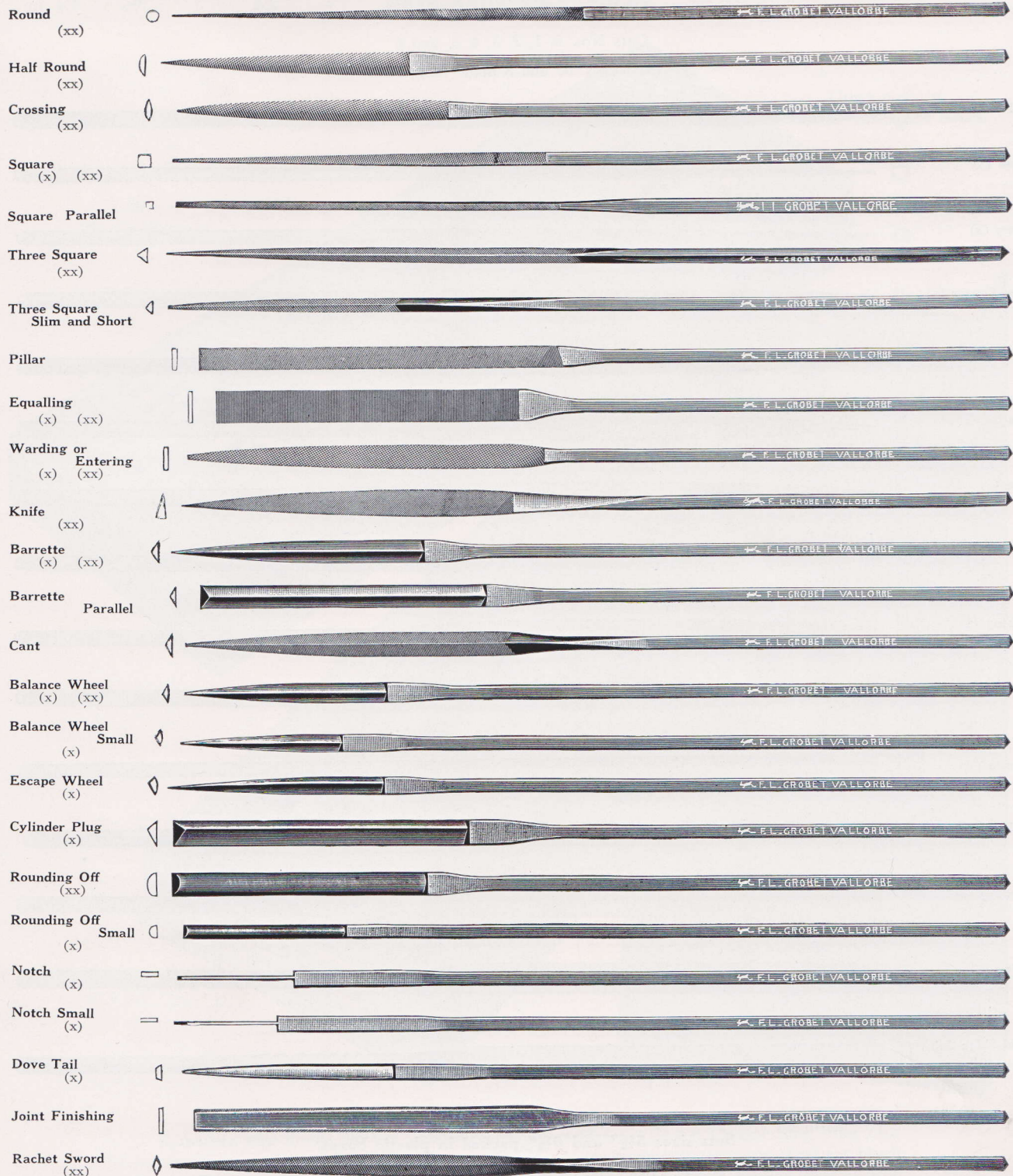
OR SQUARE HANDLE NEEDLE FILES

Length of cut varies according to shape, from $\frac{3}{4}$ in. to $2\frac{1}{2}$ in. Length over all $5\frac{1}{2}$ in.
Cuts Nos. 0, 1, 2, 3, 4, 5, 6, and 8

Sets in Plastic Boxes

Assorted Set of 12 (x) for Watchmakers Cut No. 6.

Assorted Set of 12 (xx) for Mechanics Cuts Nos. 0, 2, 4 and 6.



The above illustrations are full size
Also Slitting, Pippin, Crochet made in Cuts Nos. 0, 2, 4 and 6 only.

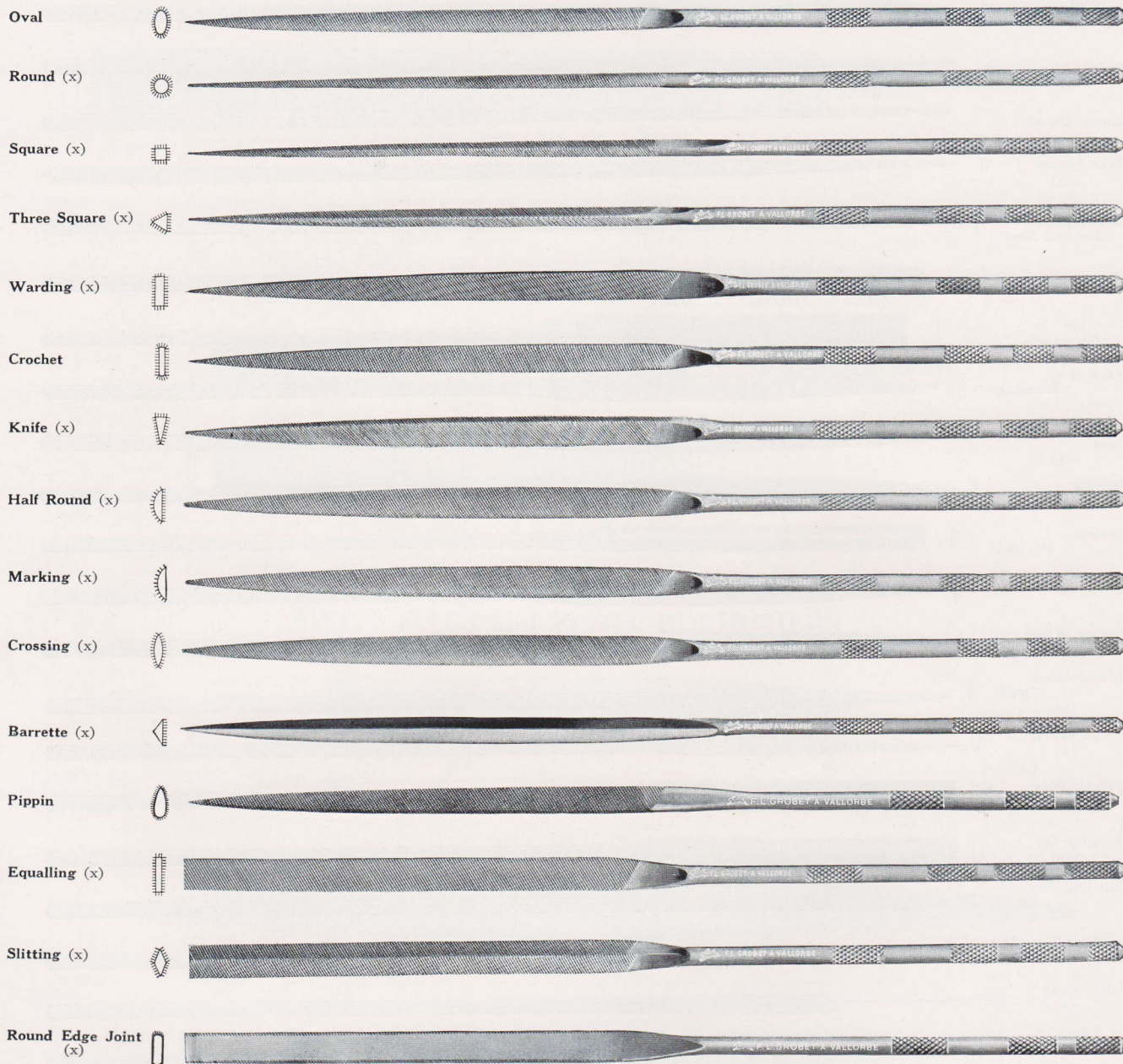
NEEDLE FILES

WITH ROUND KNURLED HANDLES

Length over all.....	4	4¾	5½	6¼	7	7¾ in.
Length over all.....	10	12	14	16	18	20 cm.
Length of cut.....	1¾	2	2½	3	3½	4⅛ in.

Cuts Nos. 0, 1, 2, 3, 4, 5, and 6

Cuts Nos. 00 and 8 made to order



Assorted set of 12 (x)

Sets sizes 5½" and 6¼" packed in plastic boxes.

Needle Files 4 and 4¾ in. are not made in Cut No. 5.
 The above illustrations show full size of 5½ in. or 14 cm.

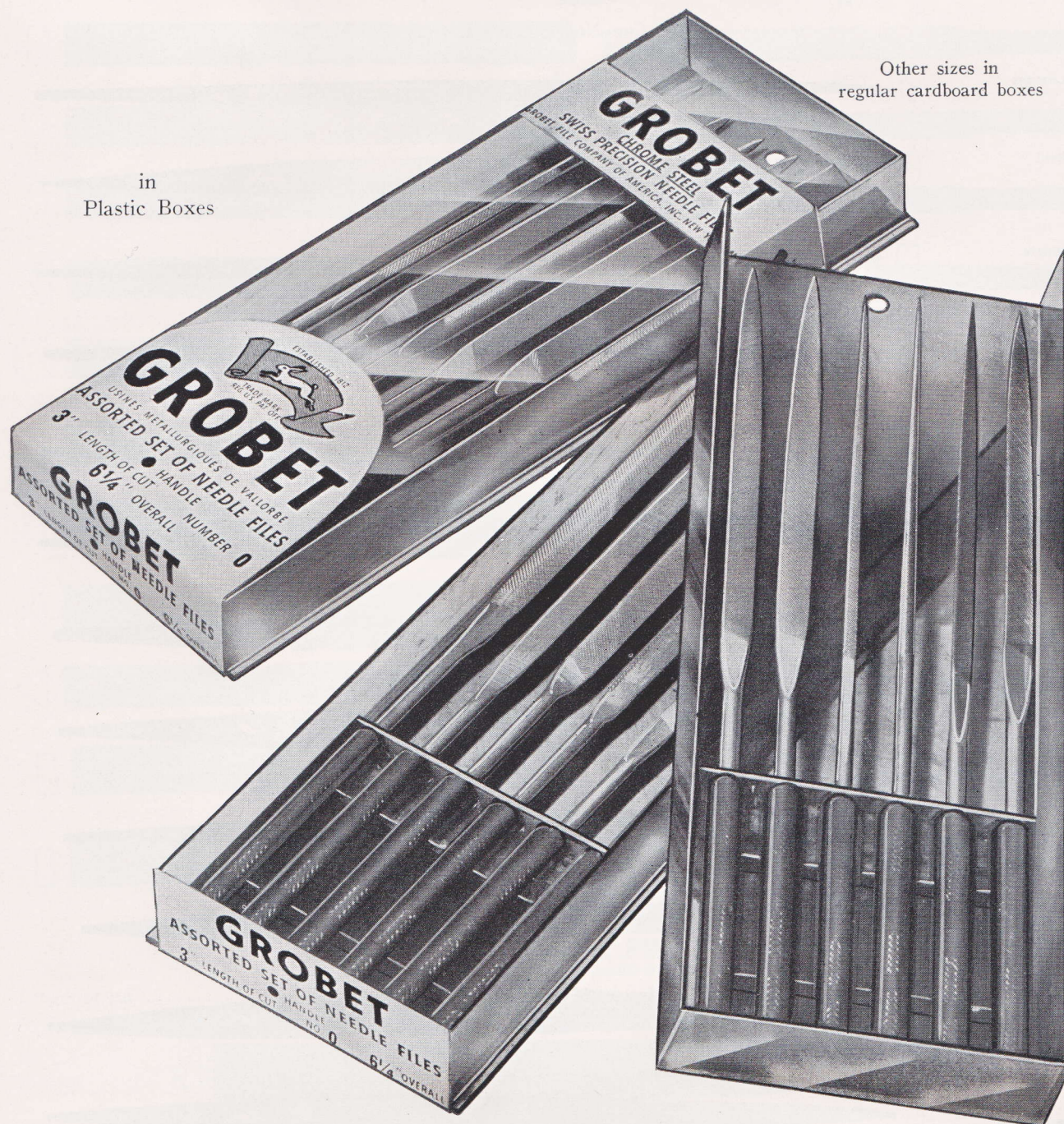
GROBET NEEDLE FILES

5½ and 6¼

WITH KNURLED HANDLES

in
Plastic Boxes

Other sizes in
regular cardboard boxes



A modern new needle file box, containing one dozen assorted Grobet Chrome Steel Files (for assortment see page 12). Slides open and divides into two compartments—practical for bench use. Exclusive Plastic Springs hold each file securely—files do not touch, become loose or drop out. Sets of Escapement Files are also packed in plastic boxes.

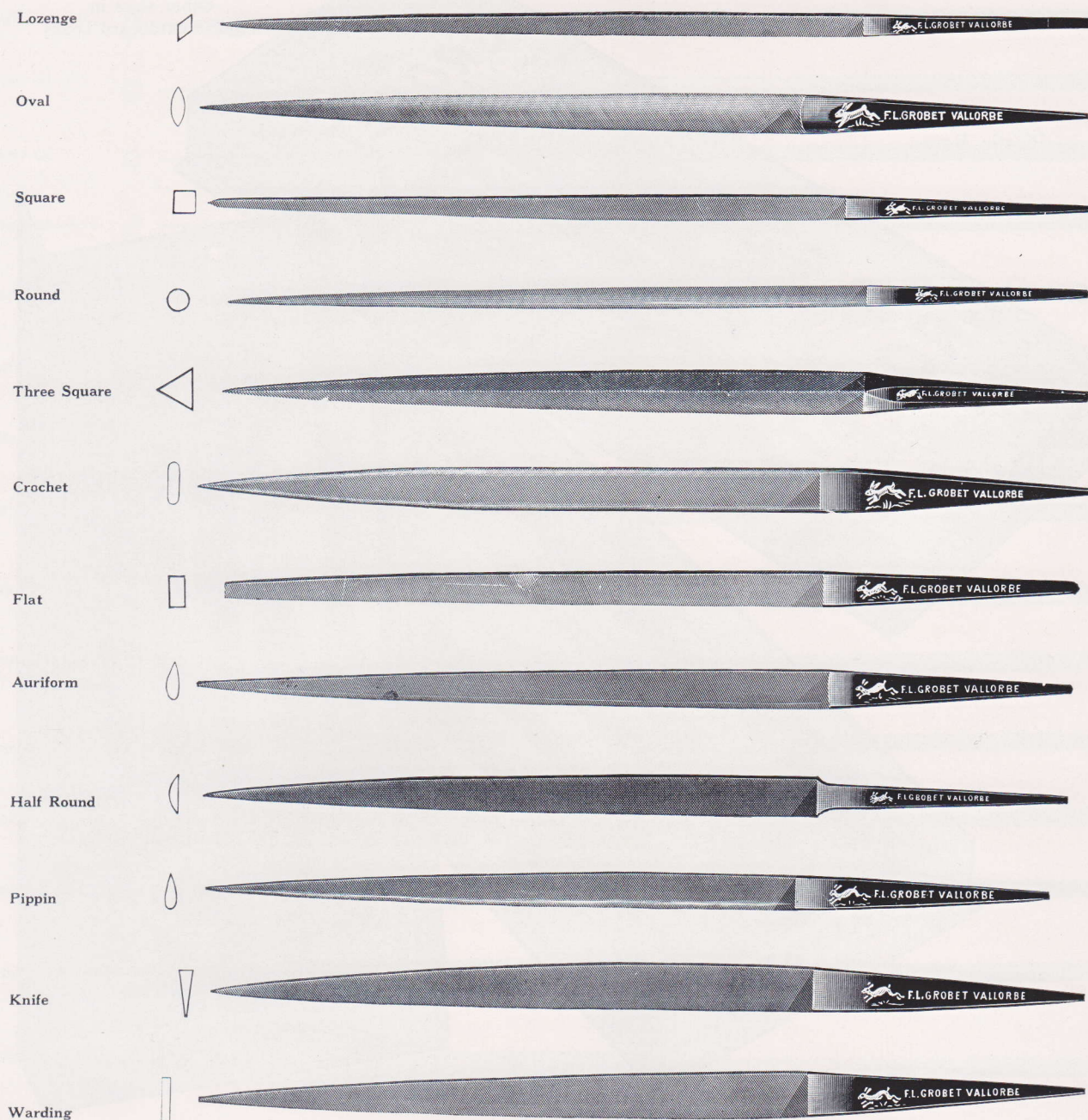


DIE SINKERS' FILES

For Die Sinkers and Tool Makers

Length..... 3½ in.

Cuts Nos. 0, 1, 2, and 4



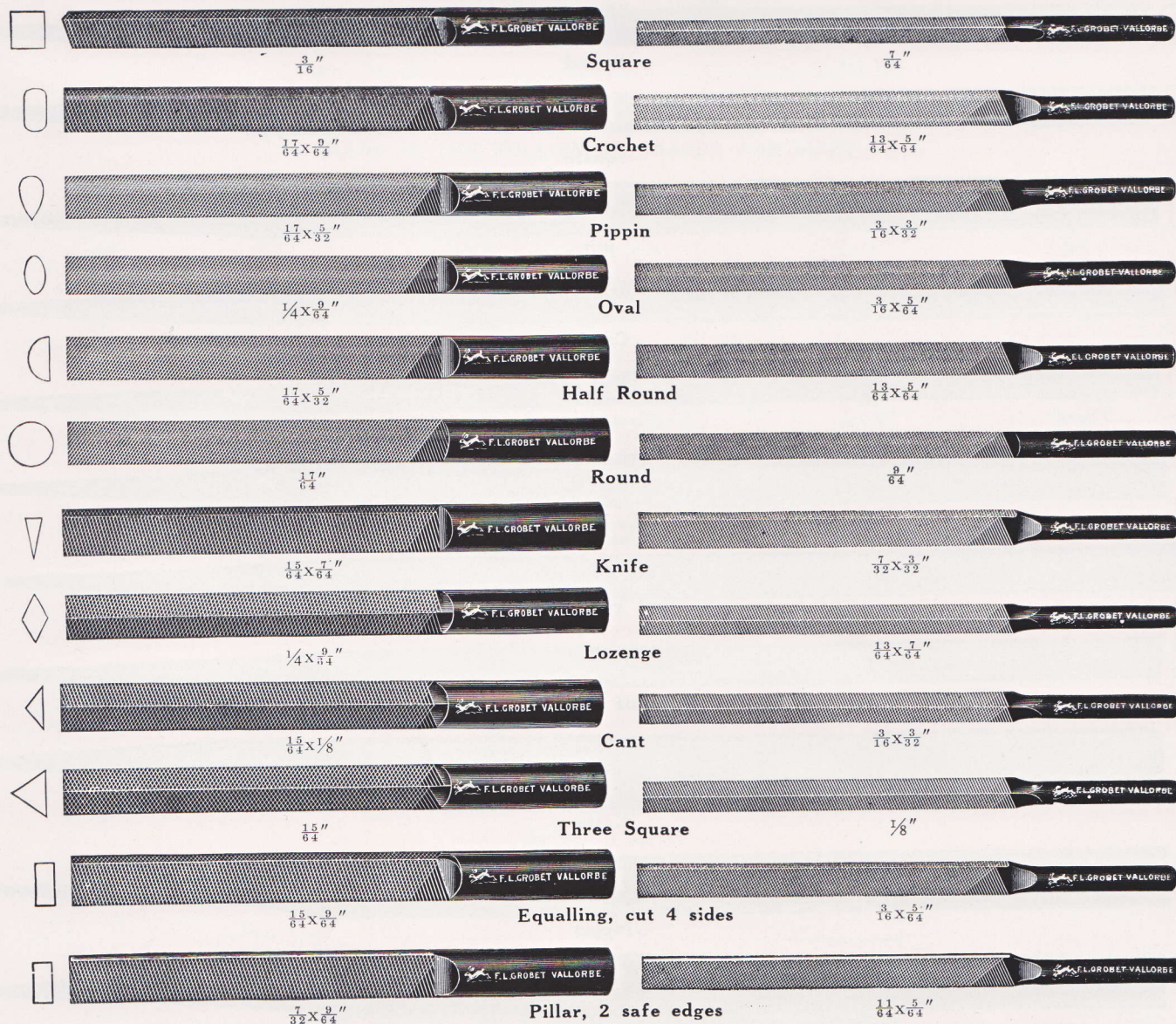
The above illustrations are full size

Also available in Assorted Set of 12



PARALLEL MACHINE FILES—Types A and B OR BENCH FILING MACHINE FILES CUT ON THE DOWNWARD STROKE

Length of cut..... $2\frac{1}{4}$ in. Length over all..... $3\frac{1}{4}$ in.
Cuts Nos. 00, 0, and 2
Type A Round shank..... $\frac{1}{4}$ in. diameter Type B Round shank..... $\frac{1}{8}$ in. diameter

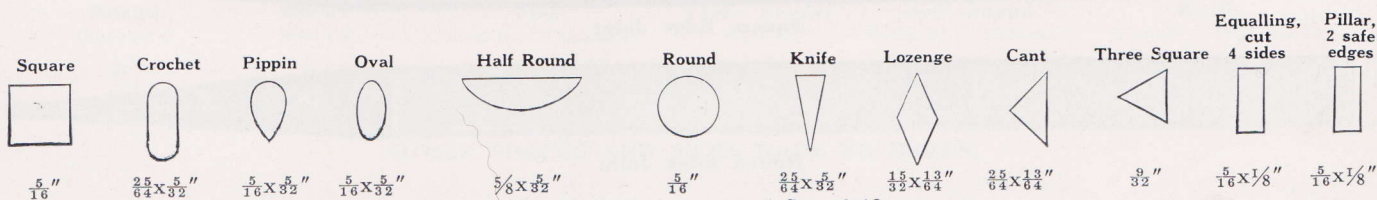


The above illustrations are full size

Also available in Assorted Set of 12

PARALLEL MACHINE FILES—Type X CUT ON THE DOWNWARD STROKE

Length of cut..... $3\frac{1}{2}$ in. Length over all..... $4\frac{3}{4}$ in.
Cuts Nos. 00, 0, and 2 Round shank..... $\frac{5}{16}$ in. diameter



Also available in Assorted Set of 12



PARALLEL MACHINE FILES—Type C

CUT ON THE UPWARD STROKE

Can also be used by hand



Round



Square



Pillar



Crochet



Three Square



Crossing



Oval



Half Round



Knife



Pippin



Lozenge



Cant



Square Edge Joint



Round Edge Joint



PARALLEL MACHINE FILES—Type C

CUT ON THE UPWARD STROKE

Can also be used by hand

Length of cut..... 5 in.

Length over all..... $6\frac{7}{8}$ in.

Cuts Nos. 00, 0, and 2

MADE IN THE FOLLOWING SHAPES AND SIZES

Round

$\frac{1}{16}$ "
 $\frac{3}{32}$ "
 $\frac{1}{8}$ "
 $\frac{5}{32}$ "
 $\frac{3}{16}$ "
 $\frac{1}{4}$ "

Square

$\frac{1}{8}$ "
 $\frac{5}{32}$ "
 $\frac{3}{16}$ "
 $\frac{1}{4}$ "

Pillar

Cut 4 Sides

$\frac{1}{8} \times \frac{1}{16}$ "
 $\frac{3}{16} \times \frac{1}{16}$ "
 $\frac{3}{16} \times \frac{3}{32}$ "
 $\frac{1}{4} \times \frac{1}{8}$ "
 $\frac{3}{8} \times \frac{1}{16}$ "

Pillar

Cut 2 Sides

$\frac{1}{4} \times \frac{1}{8}$ "

Crochet

$\frac{3}{16} \times .095$ "
 $\frac{1}{4} \times \frac{1}{8}$ "
 $\frac{3}{8} \times \frac{1}{8}$ "

Three Square

$\frac{3}{32}$ "
 $\frac{1}{8}$ "
 $\frac{3}{16}$ "
 $\frac{1}{4}$ "

Crossing

$\frac{5}{16} \times \frac{7}{64}$ "

Oval

$\frac{1}{4} \times \frac{1}{8}$ "

Half Round

$\frac{1}{4} \times \frac{7}{64}$ "
 $\frac{5}{16} \times \frac{7}{8}$ "
 $\frac{3}{8} \times \frac{9}{64}$ "

Knife

$\frac{3}{8} \times \frac{5}{64}$ "

Pippin

$\frac{1}{32} \times \frac{7}{64}$ "
 $\frac{3}{8} \times \frac{1}{8}$ "

Lozenge

$\frac{5}{16} \times \frac{13}{64}$ "

Cant

Cut 3 Sides

$\frac{5}{16} \times \frac{5}{32}$ "
 $\frac{3}{8} \times \frac{3}{16}$ "

Square Edge Joint

$\frac{1}{4} \times \frac{1}{16}$ "

Round Edge Joint

$\frac{1}{4} \times \frac{1}{16}$ "
 $\frac{3}{8} \times \frac{3}{64}$ "

ASSORTED SET OF 12 (*)

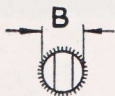
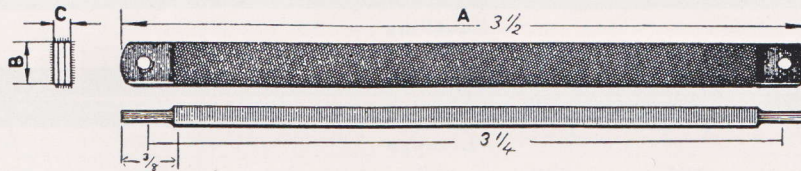
PARALLEL MACHINE FILES—Type D

For Elgin, Waltham, Williams and Ames Filing Machines

Cuts Nos. 0 and 2

Length of cut 3 in.

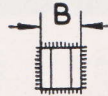
Length over all $3\frac{1}{2}$ in.



Round

Diameter B

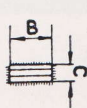
$\frac{3}{32}$ "
 $\frac{3}{16}$ "



Square

Width B

$\frac{3}{32}$ "
 $\frac{3}{16}$ "



Flat

Width B Thickness C

$\frac{1}{8}$ "
 $\frac{1}{4}$ "

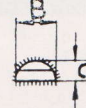
$\frac{3}{32}$ "
 $\frac{1}{16}$ "



Three Square

Width B

$\frac{1}{8}$ "
 $\frac{1}{4}$ "

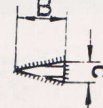


Half Round

Width B Thickness C

$\frac{1}{8}$ "
 $\frac{1}{4}$ "

$\frac{1}{16}$ "
 $\frac{1}{8}$ "



Knife

Width B Thickness C

$\frac{5}{32}$ "
 $\frac{1}{4}$ "

$\frac{3}{64}$ "
 $\frac{5}{64}$ "

OTHER SHAPES AND SIZES MADE TO ORDER

PARALLEL MACHINE FILES—Type E

For Oliver, Harvey, Butterfly, Cochrane-Bly, Milwaukee and Similar Filing Machines
CUT ON THE DOWNWARD STROKE

Length of cut.....6 in.

Cuts 000-00-0-2

Length over all.....8 in.



Round



Square



Pillar



Crochet



Three Square



Half Round



Crossing



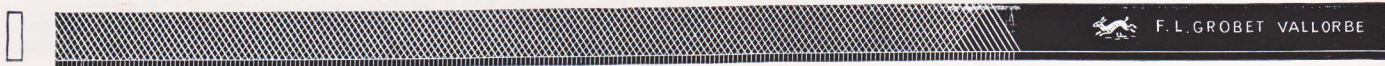
Oval



Knife



Pippin



Equalling



Lozenge



Cant

Round	Square	Pillar Cut 4 Sides	Pillar Cut 2 Sides	Three Square	Crossing	Pippin	Cant Cut 3 Sides
$\frac{3}{8}$ " $\frac{1}{8}$ " $\frac{3}{8}$ " $\frac{1}{6}$ " $\frac{1}{4}$ " $\frac{1}{6}$ " $\frac{1}{8}$ " $\frac{1}{2}$ " $\frac{5}{8}$ "	$\frac{1}{8}$ " $\frac{3}{16}$ " $\frac{1}{4}$ " $\frac{5}{16}$ " $\frac{3}{4}$ " $\frac{1}{2}$ " $\frac{3}{8}$ " $\frac{1}{2}$ " $\frac{5}{8}$ "	$\frac{3}{16} \times \frac{1}{16}$ " $\frac{3}{16} \times \frac{3}{32}$ " $\frac{3}{16} \times \frac{1}{8}$ " $\frac{1}{4} \times \frac{1}{8}$ " $\frac{3}{8} \times \frac{1}{16}$ " $\frac{1}{2} \times \frac{3}{16}$ " $\frac{1}{2} \times \frac{1}{4}$ " $\frac{5}{8} \times \frac{1}{16}$ " $\frac{3}{4} \times \frac{3}{8}$ "	$\frac{1}{4} \times \frac{1}{8}$ " $\frac{1}{2} \times \frac{1}{4}$ " Crochet $\frac{1}{16} \times \frac{1}{16}$ " $\frac{1}{8} \times \frac{3}{32}$ " $\frac{1}{4} \times \frac{1}{8}$ " $\frac{3}{8} \times \frac{1}{16}$ " $\frac{1}{2} \times \frac{5}{16}$ " $\frac{1}{2} \times \frac{1}{4}$ " $\frac{5}{8} \times \frac{1}{16}$ "	$\frac{3}{8}$ " $\frac{1}{4}$ " $\frac{1}{2}$ " Half Round $\frac{3}{8} \times \frac{1}{16}$ " $\frac{1}{4} \times \frac{1}{8}$ " $\frac{3}{8} \times \frac{9}{32}$ " $\frac{1}{2} \times \frac{1}{4}$ " $\frac{5}{8} \times \frac{13}{64}$ " $\frac{3}{4} \times \frac{1}{4}$ "	$\frac{3}{16} \times \frac{7}{16}$ " $\frac{1}{4} \times \frac{1}{8}$ " $\frac{1}{4} \times \frac{9}{16}$ " $\frac{3}{8} \times \frac{3}{2}$ " Oval $\frac{3}{16} \times \frac{7}{16}$ " $\frac{1}{4} \times \frac{1}{8}$ " $\frac{1}{4} \times \frac{9}{16}$ " $\frac{3}{8} \times \frac{3}{2}$ " Knife $\frac{1}{2} \times \frac{1}{8}$ "	$\frac{1}{6} \times \frac{5}{2}$ " Equalling $\frac{1}{16} \times \frac{3}{2}$ " Lozenge $\frac{1}{32} \times \frac{1}{4}$ "	$\frac{1}{4} \times \frac{5}{8}$ " $\frac{3}{8} \times \frac{3}{8}$ " $\frac{1}{16} \times \frac{3}{2}$ " $\frac{1}{2} \times \frac{1}{4}$ " Barrette Cut on Flat Side Only $\frac{1}{4} \times \frac{5}{32}$ " $\frac{3}{8} \times \frac{1}{16}$ "

ASSORTED SET OF 6 (**)

ASSORTED SET OF 6 (***)

ASSORTED SET OF 12 (†)

ASSORTED SET OF 12 (*)



PARALLEL MACHINE FILES—Type F

Tension Type For Thiel, Excel, Index and Simplex Machines and Similar Filing Machines

Cut No. 00 (Bastard)

Cut No. 2 (Smooth)



Length	FLAT	SQUARE	THREE SQUARE	CANT	ROUND	HALF ROUND	CROSSING	KNIFE	CROCHET	PIPPIN	OVAL	RACHET
4"	1 $\frac{5}{64} \times \frac{3}{64}$	17 $\frac{3}{64}$	33 $\frac{3}{64}$	49 $\frac{1}{16} \times \frac{1}{64}$	65 $\frac{3}{64}$	81 $\frac{1}{16} \times \frac{1}{64}$	97 $\frac{1}{16} \times \frac{1}{64}$	129 $\frac{5}{64} \times \frac{3}{64}$	145 $\frac{5}{64} \times \frac{1}{64}$	177 $\frac{5}{64} \times \frac{1}{64}$	222 $\frac{7}{32} \times \frac{3}{32}$	
4"	2 $\frac{1}{8} \times \frac{1}{16}$	18 $\frac{5}{64}$	34 $\frac{5}{64}$	50 $\frac{5}{64} \times \frac{3}{64}$	66 $\frac{5}{64}$	82 $\frac{5}{64} \times \frac{3}{64}$	98 $\frac{5}{64} \times \frac{3}{64}$	130 $\frac{1}{8} \times \frac{3}{64}$	146 $\frac{1}{8} \times \frac{3}{64}$	178 $\frac{5}{64} \times \frac{3}{64}$	224 $\frac{15}{64} \times \frac{5}{64}$	
4"											226 $\frac{3}{8} \times \frac{5}{32}$	
5"	6 $\frac{5}{32} \times \frac{5}{64}$	22 $\frac{1}{8}$	38 $\frac{1}{8}$	54 $\frac{1}{8} \times \frac{5}{64}$	70 $\frac{1}{8}$	86 $\frac{1}{8} \times \frac{5}{64}$	102 $\frac{1}{8} \times \frac{5}{64}$	134 $\frac{1}{8} \times \frac{5}{64}$	150 $\frac{1}{8} \times \frac{5}{64}$	182 $\frac{1}{8} \times \frac{5}{64}$		244 $\frac{15}{64} \times \frac{1}{8}$
6"	7 $\frac{3}{16} \times \frac{5}{64}$	23 $\frac{5}{32}$	39 $\frac{5}{32}$	55 $\frac{5}{32} \times \frac{1}{8}$	71 $\frac{5}{32}$	87 $\frac{5}{32} \times \frac{5}{64}$	103 $\frac{5}{32} \times \frac{5}{64}$	135 $\frac{5}{32} \times \frac{5}{64}$	151 $\frac{5}{32} \times \frac{5}{64}$	183 $\frac{5}{32} \times \frac{5}{64}$		
5"	9 $\frac{3}{16} \times \frac{1}{8}$	25 $\frac{1}{16}$	41 $\frac{1}{16}$	57 $\frac{3}{16} \times \frac{1}{8}$	73 $\frac{5}{16}$	89 $\frac{3}{16} \times \frac{1}{8}$	105 $\frac{1}{16} \times \frac{1}{8}$	137 $\frac{3}{16} \times \frac{1}{8}$	153 $\frac{3}{16} \times \frac{1}{8}$	185 $\frac{3}{16} \times \frac{1}{8}$		245 $\frac{9}{32} \times \frac{9}{64}$
6"	12 $\frac{5}{16} \times \frac{1}{8}$	28 $\frac{3}{32}$	44 $\frac{9}{32}$	60 $\frac{5}{16} \times \frac{1}{8}$	76 $\frac{3}{32}$	92 $\frac{5}{16} \times \frac{1}{8}$	108 $\frac{1}{4} \times \frac{1}{8}$	140 $\frac{5}{16} \times \frac{5}{32}$	156 $\frac{9}{32} \times \frac{1}{8}$	188 $\frac{5}{16} \times \frac{1}{8}$		
6"	13 $\frac{5}{16} \times \frac{5}{32}$	29 $\frac{1}{16}$	45 $\frac{5}{16}$	61 $\frac{5}{16} \times \frac{5}{32}$	77 $\frac{5}{16}$	93 $\frac{5}{16} \times \frac{5}{32}$	109 $\frac{9}{16} \times \frac{5}{32}$	141 $\frac{5}{32} \times \frac{5}{32}$	157 $\frac{5}{16} \times \frac{5}{32}$	189 $\frac{5}{16} \times \frac{5}{32}$		
8"	16 $\frac{3}{8} \times \frac{1}{16}$	32 $\frac{3}{8}$	48 $\frac{3}{8}$	64 $\frac{3}{8} \times \frac{3}{16}$	80 $\frac{3}{8}$	96 $\frac{3}{8} \times \frac{3}{16}$	112 $\frac{3}{8} \times \frac{3}{16}$	144 $\frac{3}{8} \times \frac{3}{16}$	160 $\frac{3}{8} \times \frac{5}{16}$	192 $\frac{3}{8} \times \frac{3}{16}$		
5"	501 $\frac{13}{32} \times \frac{1}{32}$								502 $\frac{13}{32} \times \frac{1}{32}$			
6"	503 $\frac{5}{8} \times \frac{5}{64}$								504 $\frac{5}{8} \times \frac{5}{64}$			

PARALLEL MACHINE FILES—Type G

Compression Type for Thiel, Excel, Index and Simplex Machines and Similar Filing Machines

CUT ON THE DOWNWARD STROKE

Cut No. 00 (Bastard)

Cut No. 2 (Smooth)



Length	FLAT	SQUARE	3 SQUARE	CANT	ROUND	HALF ROUND	CROSSING	KNIFE	CROCHET	KNIFE RD. BACK
6"	301 $\frac{7}{16} \times \frac{5}{32}$	313 $\frac{3}{16}$	325 $\frac{8}{16}$	337 $\frac{1}{16} \times \frac{5}{32}$	349 $\frac{3}{32}$	361 $\frac{3}{8} \times \frac{5}{32}$	373 $\frac{3}{8} \times \frac{5}{32}$	397 $\frac{1}{16} \times \frac{1}{8}$	409 $\frac{7}{16} \times \frac{5}{32}$	433 $\frac{7}{16} \times \frac{1}{8}$
6"	303 $\frac{5}{8} \times \frac{1}{4}$	315 $\frac{3}{8}$	327 $\frac{3}{8}$	339 $\frac{5}{8} \times \frac{1}{4}$	351 $\frac{1}{16}$	363 $\frac{1}{16} \times \frac{1}{4}$	375 $\frac{9}{16} \times \frac{1}{4}$	399 $\frac{5}{8} \times \frac{1}{16}$	411 $\frac{5}{8} \times \frac{1}{4}$	435 $\frac{5}{8} \times \frac{1}{16}$
8"	304 $\frac{5}{8} \times \frac{3}{16}$	316 $\frac{5}{16}$	328 $\frac{5}{16}$	340 $\frac{5}{8} \times \frac{3}{16}$	352 $\frac{1}{4}$	364 $\frac{5}{8} \times \frac{3}{16}$	376 $\frac{5}{8} \times \frac{3}{16}$	400 $\frac{9}{16} \times \frac{5}{32}$	412 $\frac{5}{8} \times \frac{3}{16}$	436 $\frac{9}{16} \times \frac{5}{32}$
8"	305 $\frac{3}{4} \times \frac{1}{4}$	317 $\frac{3}{8}$	329 $\frac{7}{16}$	341 $\frac{3}{32} \times \frac{1}{4}$	353 $\frac{5}{16}$	365 $\frac{3}{32} \times \frac{1}{4}$	377 $\frac{3}{32} \times \frac{1}{4}$	401 $\frac{5}{8} \times \frac{3}{16}$	413 $\frac{3}{32} \times \frac{1}{4}$	437 $\frac{3}{32} \times \frac{1}{4}$
8"	306 $\frac{29}{32} \times \frac{9}{32}$	318 $\frac{15}{32}$	330 $\frac{9}{16}$	342 $\frac{3}{32} \times \frac{9}{32}$	354 $\frac{3}{8}$	366 $\frac{3}{32} \times \frac{9}{32}$	378 $\frac{3}{32} \times \frac{9}{32}$	402 $\frac{3}{32} \times \frac{1}{4}$	414 $\frac{29}{32} \times \frac{1}{4}$	438 $\frac{3}{32} \times \frac{1}{4}$
10"	307 $\frac{3}{32} \times \frac{1}{4}$	319 $\frac{3}{8}$	331 $\frac{3}{8}$	343 $\frac{1}{16} \times \frac{1}{4}$	355 $\frac{1}{16}$	367 $\frac{1}{16} \times \frac{1}{4}$	379 $\frac{1}{16} \times \frac{1}{4}$	403 $\frac{1}{16} \times \frac{3}{16}$	415 $\frac{3}{32} \times \frac{1}{4}$	439 $2 \frac{3}{32} \times \frac{1}{4}$
10"	308 $\frac{29}{32} \times \frac{9}{32}$	320 $\frac{15}{32}$	332 $\frac{9}{16}$	344 $\frac{29}{32} \times \frac{9}{32}$	356 $\frac{3}{8}$	368 $\frac{29}{32} \times \frac{5}{16}$	380 $\frac{9}{32} \times \frac{5}{16}$	404 $\frac{7}{8} \times \frac{1}{4}$	416 $\frac{3}{32} \times \frac{9}{32}$	440 $\frac{29}{32} \times \frac{9}{32}$
10"	309 $1 \frac{1}{16} \times \frac{5}{16}$	321 $\frac{19}{32}$	333 $\frac{23}{32}$	345 $1 \times \frac{3}{8}$	357 $\frac{15}{32}$	369 $1 \frac{1}{16} \times \frac{3}{8}$	381 $1 \frac{1}{16} \times \frac{3}{8}$	405 $1 \times \frac{9}{32}$	417 $1 \frac{1}{16} \times \frac{3}{8}$	441 $1 \times \frac{5}{16}$

REGULAR RIFFLERS

Die Sinkers

Approximate length over all.....

Small
5½Medium
6Large
7 in.

Cuts Nos. 0, 2, 3, 4, and 6



Also available in Assorted Set of 18

REGULAR RIFFLERS

Die Sinkers

MEDIUM

Approximate length over all..... 6 in.

Cuts Nos. 0, 2, 4, and 6



Assorted Set of 24 (*)

Also available in Large Size 7 in. (†)

SILVERSMITHS' RIFFLERS

Approximate length over all..... 7 8 in.

Cuts Nos. 0, 2, and 3



Also available in Assorted Set of 12

The above illustrations show full size of 7 in.

SPECIAL SILVERSMITHS' RIFFLERS

Approximate length over all.....8 in.

Cut No. 1



Also available in Assorted Set of 12

DIE MAKERS' RIFFLERS

Approximate length over all.....7 in.

Cuts Nos. 0, 2, and 3



Also available in Assorted Set of 30
The above illustrations are full size

DIE MAKERS' RIFFLERS

Approximate length over all.....7 in.

Cuts Nos. 0, 2, and 3



Also available in Assorted Set of 30
The above illustrations are full size

DIE MAKERS' RIFFLERS

Approximate length over all.....7 in.

Cuts Nos. 0, 2, and 3



Also available in Assorted Set of 30

The above illustrations are full size

WOOD RIFFLERS

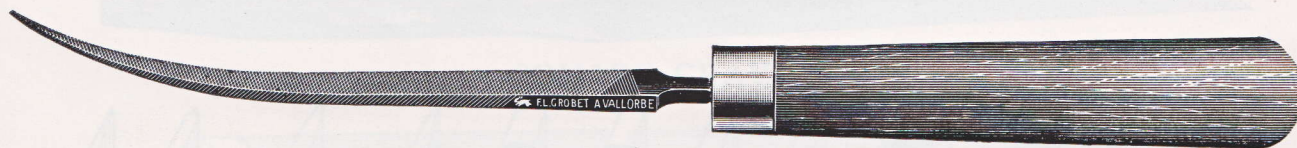
Approximate length over all.....7 in.



French Riffers or Wood Riffers are used by cabinet makers and wood pattern makers.

Also available in Assorted Set of 8

BENT RIFFLERS HANDLED



Three Square Bastard



Hand Bastard



Joint Bastard



Half Round Bastard



Round Rasp



Three Square Rasp

Length of cut $3\frac{1}{2}$ in.

Also available in Assorted Set of 6



Grobet Tools for Die Makers, Tool Makers, Watchmakers, Jewelers, Engravers and Opticians

GROBET PENTAGON BROACHES OR REAMERS



Length of cutting part.....	1¾	2	2¼	2½ in.			
Diameter Stubs Drill Rod Gauge.....	80, 77	75, 72	70, 67, 65, 62	60, 57, 55, 52, 50			
Length of cutting part.....	2¾	3	3¼	3½	3¾ in.		
Diameter Stubs Drill Rod Gauge.....	48, 45	43, 40, 38, 35	33, 30, 28, 25	20, 15	10, 5		
Length of cutting part.....	4	4½	5	5½	6	7	8 in.
Diameter in fraction of an inch.....	¼	⅜	⅚	¾	⅞	⅞	⅞

CATALOG G-1

Gravers

Flat, round, onglette, oval, knife
bevel, chisel, square, lozenge, ring
and hollowware, reform, pivot
Straight and bent lining

Diesinkers' Chisels

Burnishers, straight oval blades,
bent oval blades

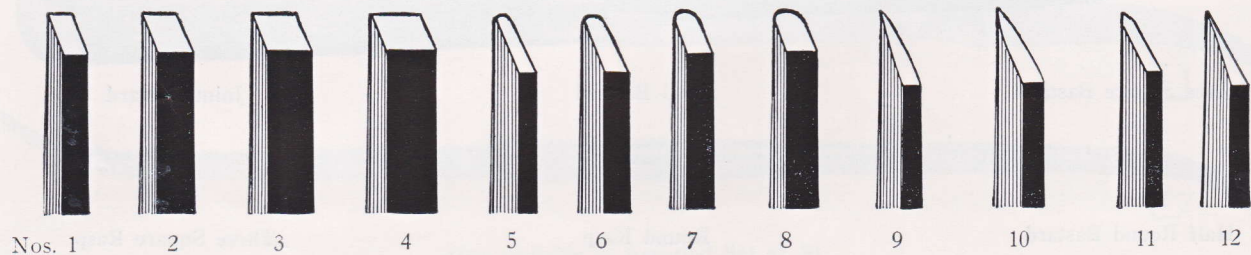
Scrapers, three square hollow

Engravers' Scribers

Engraving Needles and Scrapers

DIE SINKERS' CHISELS

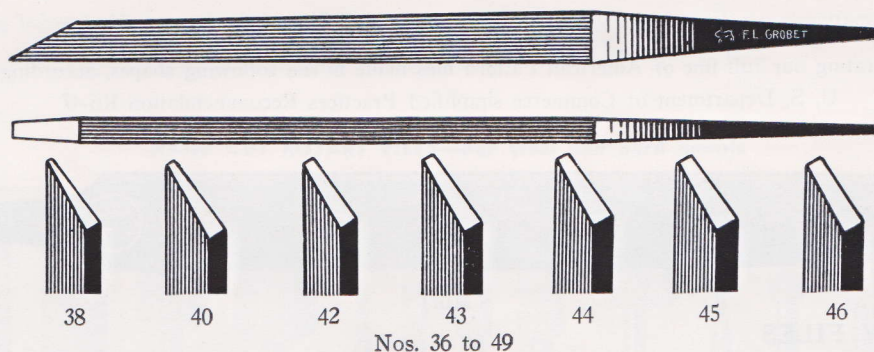
Length.....	Small 5	Medium 6	Large 7 in.
-------------	------------	-------------	----------------



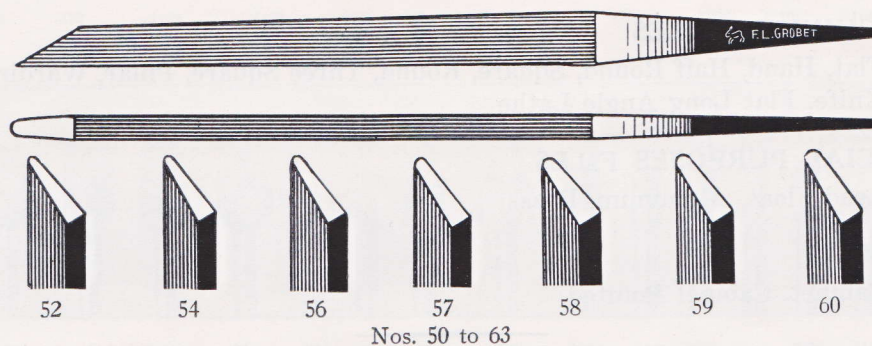
Also available in Assorted Set of 12, Nos. 1 to 12

GROBET GRAVERS

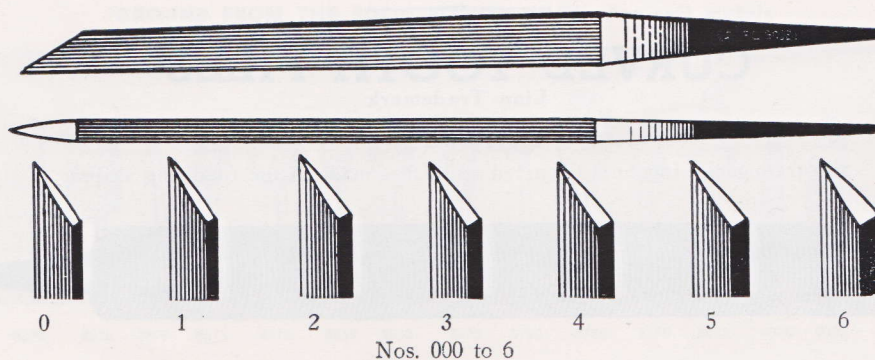
FLAT GRAVERS



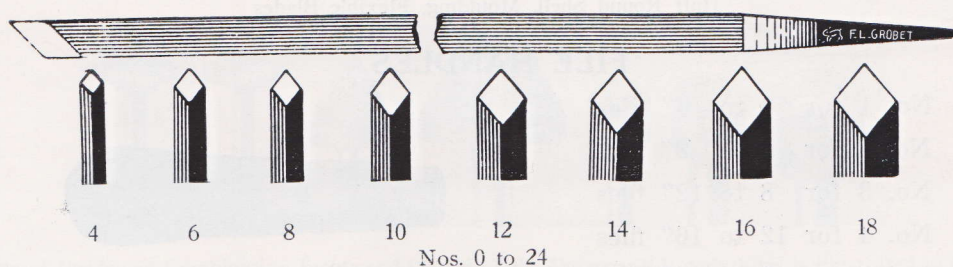
ROUND GRAVERS



ONGLETTE GRAVERS



SQUARE GRAVERS



For a full description of our line of gravers and tools, ask for our tool catalog G-1



AMERICAN PATTERN FILES

Lion Trademark

CATALOG A-1

Illustrating our full line of American Pattern files made in the following shapes, according to
U. S. Department of Commerce simplified Practices Recommendation R6-47
of September 15, 1947



(Mill)

SAW FILES

Mill, Tapers, Slim Tapers, Extra Slim Tapers, Double Extra Slim Tapers, Cantsaw, Double Enders, Crosscut

MACHINISTS' FILES

Flat, Hand, Half Round, Square, Round, Three Square, Pillar, Warding, Knife, Flat Long Angle Lathe

SPECIAL PURPOSES FILES

Lead Float, Aluminum, Brass

RASPS

Cabinet, Cabinet Pointed

MILLED CUT FILES, HAND, SHEAR CUT
TUNGSTEN POINT FILES

CURVED TOOTH FILES

Lion Trademark

CATALOG A-1

Illustrating our full line of curved tooth files made in the following shapes:

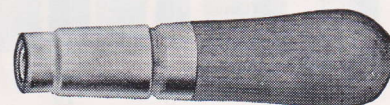


(Flat)

Flat, Pillar, Square, Half Round
Half Round Shell, Moulding, Flexible Blades

FILE HANDLES

- No. 1 for 3 to 6" files
- No. 2 for 6 to 8" files
- No. 3 for 8 to 12" files
- No. 4 for 12 to 16" files
- No. 5 for 16 to 18" files



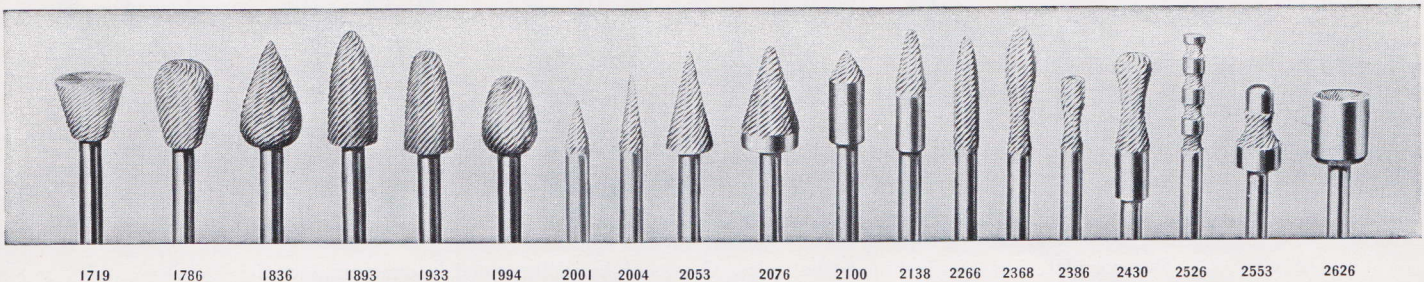
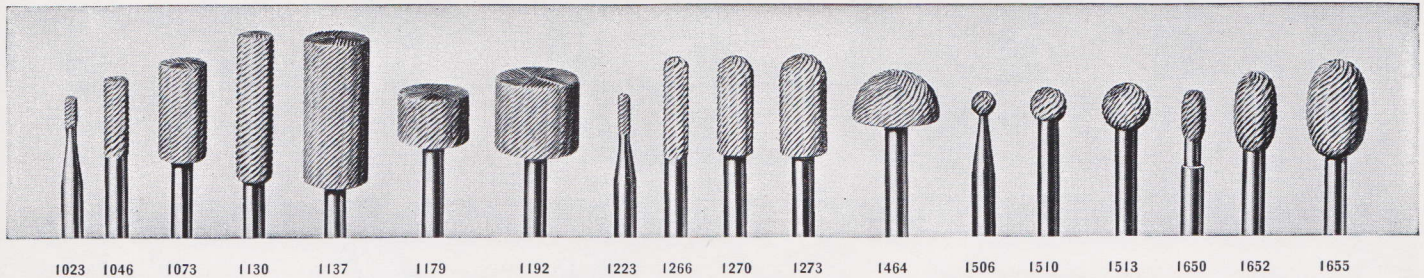


GROBET ROTARY FILES

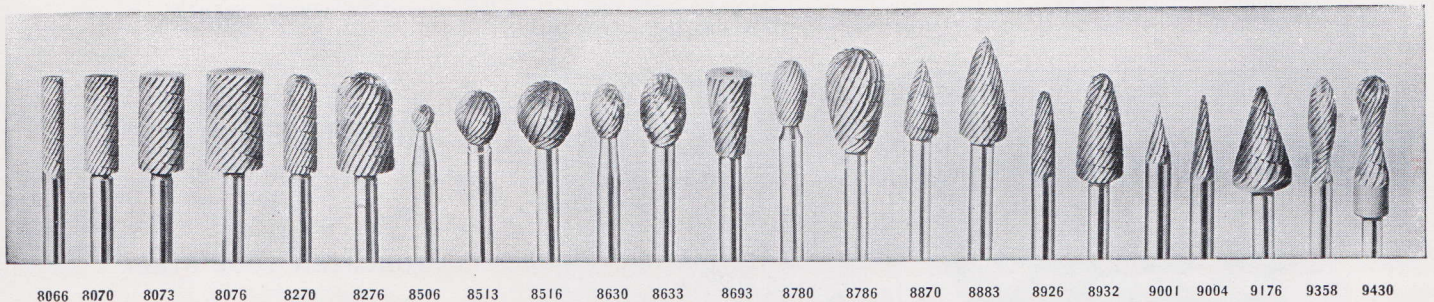
MADE OF HIGH SPEED STEEL

We are illustrating below half size only a few of the rotary files and rotary tools which we manufacture . . . our complete line of rotary files is illustrated in our Catalogue R-1.

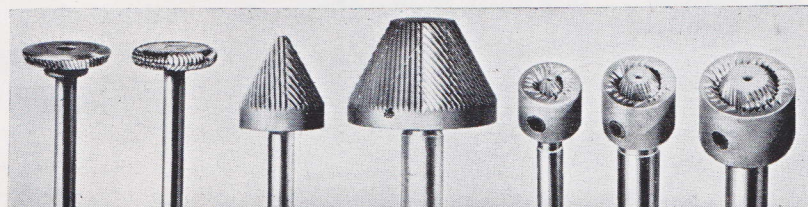
HAND CUT ROTARY FILES—For steel and hard metals



GROUND FROM THE SOLID ROTARY FILES—For soft metals



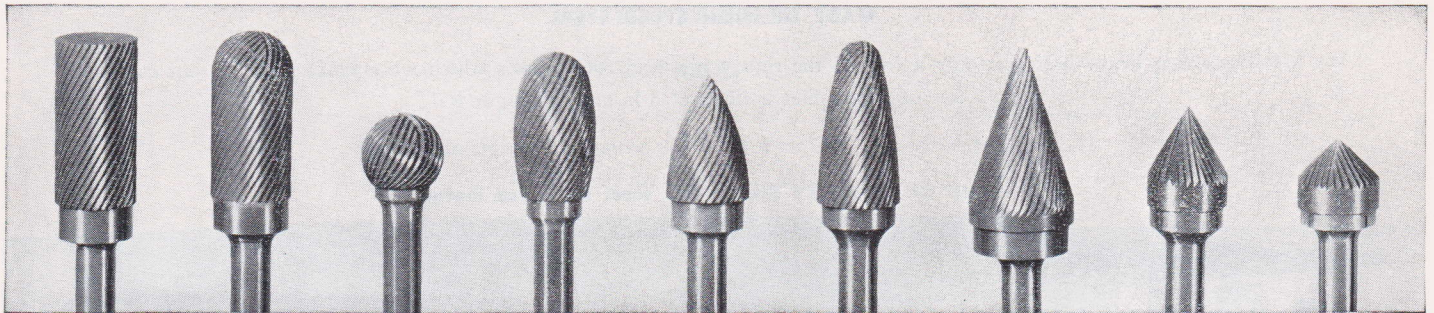
TUBE DEBURRING ROTARY FILES



Our complete line of Inside and Combination Inside and Outside Tube Deburring Rotary Files is illustrated in our pamphlet T-1

**GROUND TUNGSTEN CARBIDE ROTARY FILES—For hardened steel and hard materials**

Our complete line of Tungsten Carbide Rotary Files is illustrated in our pamphlet W-1
Files illustrated below are slightly smaller than actual sizes



A13PW

C13PW

D13FW

E13MW

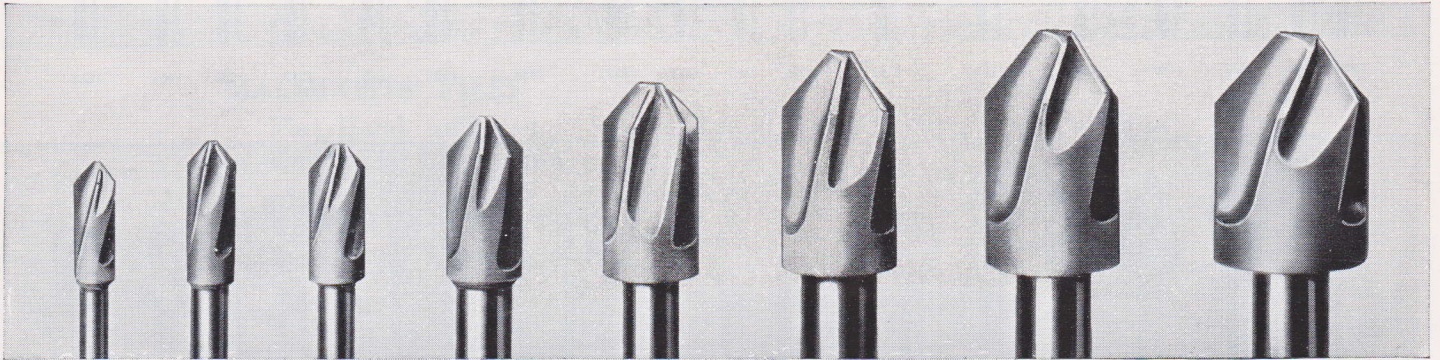
K13KW

L13PW

Q16RW

X13IW

Z13FW

COUNTERSINKS

Our complete line of Six-fluted Chatterless Countersinks is illustrated in our pamphlet C-1

Other Grobet Files and Tools

Twin-fluted Countersinks, pamphlet C-2
Counterbores, pamphlet C-3

Re-sharpening service for rotary files, countersinks, etc., pamphlet S-1
High Speed Steel Flat Drills, .002" to .100" diameter, pamphlet D-1
Plug and Ring Gauges, pamphlet J-1

**GROBET
DIE SINKERS' BURS**

**MADE OF
TUNGSTEN TOOL STEEL**

Our complete line of Die Sinkers' Burs (several hundred shapes and sizes) is illustrated in our catalogue B-1.

SET VBF IN BAKELITE BOX

